

California Regional Water
Quality Control Board
North Coast Region

Order No. 98-83

For

Administrative Civil
Liability

In The Matter Of

Russian River County
Sanitation District
For Violations Of Waste
Discharge Requirements
Order No. 92-51

And The Water Quality Control
Plan For
The North Coast Region

and

Sonoma County Water Agency
For Violations Of The Water
Quality Control Plan For
The North Coast Region

Sonoma County

WHEREAS, the California
Regional Water Quality
Control Board, North Coast
Region (Regional Water
Board), hereby finds that:

1. The Russian River County
Sanitation District
(RRCSD), 2150 W. College
Avenue, Santa Rosa, owns
a municipal wastewater
treatment facility known
as the Russian River
Wastewater Treatment
Facility (RRWTF) located
southeast of Vacation
Beach and north of the
Russian River on Neely
Road. The Sonoma County
Water Agency (SCWA) is
under contract to operate
and maintain the Russian
River Wastewater
Treatment Facility. The
treatment facility serves
the communities of
Armstrong Park, Drakes
Road area, Guerneville,
Guernwood Park, Rio Nido
and Vacation Beach.

Treated effluent is disposed of by irrigation during the irrigation season and discharged to the Russian River during the discharge season.

2. The Regional Water Board adopted Waste Discharge Requirements Order No. 92-51 (Order No. 92-51) for the wastewater treatment facility on May 28, 1992. This Order also serves as a NPDES Permit and allows the RRCSD to discharge up to one percent of the flow of the receiving water October 1 through May 14 of each year.
3. The RRCSD violated a provision and effluent limitations contained in Order No. 92-51, effluent monitoring requirements contained in Monitoring and Reporting Program No. 92-51, and Waste Discharge Prohibitions contained in the *Water Quality Control Plan for the North Coast Region* (Basin Plan) for which the Regional Water Board may impose civil liability under Section 13385 of the California Water Code.
4. The SCWA violated Waste Discharge Prohibitions contained in the Basin Plan for which the Regional Water Board may impose civil liability under Section 13385 of the California Water Code.
5. The RRCSD and the SCWA bypassed treatment and discharged approximately 30 million gallons of partially disinfected wastewater to the Russian River after receiving excessive inflows from a flood event in February 1998.

6. An evidentiary hearing on this matter was held before the Regional Water Board on May 28, 1998 in the Regional Water Board Meeting Room, 5550 Skylane Boulevard, Suite A, Santa Rosa, California. At the conclusion of the hearing, the Regional Water Board directed the Executive Officer to issue an administrative civil liability complaint in the amount of \$25,000 to the RRCSD and in the amount of \$100,000 to the SCWA. \$50,000 of the administrative civil liability for the SCWA was to be suspended conditioned upon the satisfactory completion of Task A outlined in Cease and Desist Order No. 98-57. An additional \$50,000 of the administrative civil liability for the SCWA was to be suspended conditioned upon the satisfactory completion of Task B outlined in Cease and Desist Order No. 98-57 (Order No. 98-57). Task A of Order No. 98-57 required the submittal of a report detailing short term solutions that will prevent discharging waste contrary to Waste Discharge Requirements Order No. 92-51 and the Basin Plan by August 1, 1998. Task B of Order No. 98-57 requires the submittal of a report detailing long term solutions that will prevent discharging waste contrary to Order No. 92-51 and the Basin Plan by December 1, 1998.
7. Administrative Civil Liability Complaint No. 98-56 was issued by the Executive Officer on July 2, 1998 in accordance with the Regional Water Board direction outlined

in Finding 6 above. On July 30, 1998, the SCWA and the RRCSD requested a second hearing before the Regional Water Board. Therefore, a second evidentiary hearing on this matter was held before the Regional Water Board on August 26, 1998 in the Regional Water Board Meeting Room, 5550 Skylane Boulevard, Suite A, Santa Rosa, California.

8. The SCWA submitted a report on July 30, 1998 that satisfies Task A of Cease and Desist Order No. 98-57.
9. The following sections of Waste Discharge Requirements, Order No. 92-51, were violated:

B. Effluent Limitations

1. Only advanced treated wastewater, as defined by the numerical limitations below shall be discharged from the wastewater treatment plant to the Russian River (Discharger Serial No. 001). The advanced treated wastewater shall be adequately disinfected, oxidized, coagulated, clarified and filtered (or equivalent), as determined by the State Department of Health Services. Advanced treated wastewater shall not contain constituents in excess of the following limits:

	<u>Constituent</u>	<u>Unit</u>	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
mg/l	Suspended Solids				
	10	15	20		
MPN/100ml	Coliform Organisms				
	2.2	---	23		
mg/l	Chlorine Residual				
	---	---	0.1		

4. The arithmetic mean of the BOD (20°C, 5-day) and Suspended Solids values by weight for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values, by weight, for influent samples collected at approximately the same times during the same period (85 percent removal).

E. Provisions

13. Bypass

The intentional diversion of waste streams from any portion of a treatment facility is prohibited.

10. The following sections of Monitoring and Reporting Program No. 92-51, were violated:

Monitoring Effluent Discharge to the Russian River (Discharge Serial No. 001)

During periods of discharge to the Russian River, samples shall be collected at some point in the system prior to any discharge to the river and downstream from the last connection through which effluent can be admitted to that discharge.

The following shall constitute the surface water discharge monitoring program:

Sample

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Frequency</u>
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Settleable Matter	ml/l	grab	daily
Turbidity	NTU	grab	weekly

11. The following section of the Water Quality Control Plan for the North Coast Region (Basin Plan) was violated:

Section 4. IMPLEMENTATION PLANS

POINT SOURCE MEASURES

WASTE DISCHARGE PROHIBITIONS:

The Regional Water Board declares that point source waste discharges, except as stipulated by the Thermal Plan, the Ocean Plan, and the action plans and policies contained in the Point Source Measures section of this Water Quality Control Plan, are prohibited in the following locations in the Region:

North Coastal Basin

4. The Russian River and its tributaries during the period of May 15 through September 30 and during all other periods when the waste discharge flow is greater than one percent of the receiving stream's flow as set forth in NPDES permits. In addition, the discharge of municipal waste during October 1 through May 14 shall be of advanced treated wastewater in accordance with effluent limitations contained in NPDES permits for each affected discharger, and shall meet a median coliform level of 2.2 MPN/100 ml.
12. The RRCSD violated Waste Discharge Requirements Order No. 92-51, Monitoring and Reporting Program No. 92-51 and the Basin Plan. The SCWA violated the Basin Plan.
13. The following facts are the basis for the alleged violations in this matter:
 - a. The RRWTF periodically experiences very high infiltration and inflow (I&I). These occurrences are usually associated with flooding in the lower Russian River. River water enters the collection system through plumbing fixtures of flooded homes, ajar manholes, illicit connections, and other sources.

Elevated ground water also seeps into the collection system. The facility's treatment capacity may be exceeded during times of excessive I&I.

- b. In 1997, the SCWA installed a bypass line to direct the excess influent to an emergency storage pond (1 million gallons). Stored wastewater would eventually be brought back to the headworks as flows decreased. This pipeline established more control over the flow rate through the treatment plant.
- c. February 1998 was a very wet month. According to RRCSD self-monitoring reports over 29 inches of rain fell in the Guerneville area during February 1998. As the influent rate increased, the SCWA treated an average of 0.80 MGD to Advanced Wastewater Treatment (AWT) standards. The excess flow, which averaged about 1.09 MGD, was directed to the emergency storage pond. Approximately 30.5 million gallons of bypassed wastewater was directed into the storage pond between February 2 and February 28, 1998. Calcium hypochlorite was applied to the stored wastewater in an attempt at disinfection. The bypass wastewater was blended with the AWT effluent and then discharged to the Russian River. Approximately 30 million gallons of partially disinfected wastewater was discharged to the

Russian River between
February 3 and March 1,
1998.

- d. The SCWA notified
Regional Water Board
staff as well as the
appropriate local
agencies within hours
of the discharge to the
river. An initial
report was submitted
within several days
after the start of the
discharge and follow-up
reports were submitted
as well.
- e. Samples were taken
after blending and
prior to discharge to
the Russian River.
Analysis of the samples
demonstrated the
following violations of
Order No. 92-51:
 - 27 coliform
violations,
 - 2 chlorine residual
violations,
 - 14 total suspended
solids violations,
 - and
 - 1 biochemical
oxygen demand
violation.

The violations are
summarized in
Attachment 1, which is
hereby incorporated and
made a part of this
Order.

- f. Samples of the AWT
effluent taken prior to
blending indicate
adequate treatment for
the 0.80 MGD of sewage
not bypassed. This
sampling conforms to
Monitoring and
Reporting Program No.
92-51. The sampling of
the blended wastewater,
however, did not
conform to the required
monitoring program.
Two constituents
(settleable matter and
turbidity) were omitted
from the list of
required constituents,

violating the
Monitoring and
Reporting Program No.
92-51.

- g. The discharge also violated Section 4 of the Basin Plan. The Basin Plan requires that only AWT effluent which meets a median coliform level of 2.2 MPN/100 ml shall be discharged to the Russian River.

Proposed Civil Liability

14. Section 13385(a) of the California Water Code provides for the imposition of civil liabilities against dischargers who violate waste discharge requirements or prohibition issued by the Regional Water Board. Section 13385(c) defines the amount of civil liability that may be imposed by the Regional Water Board as up to \$10,000 per day of violation and \$10 per gallon of waste discharged and not cleaned up in excess of 1,000 gallons. The civil liability that could be imposed against the RRCSD and the SCWA in this matter is calculated as follows:

- Twenty-seven days of bypass from February 2 through February 28, 1998,
- Twenty-seven days of discharge of partially disinfected wastewater to the Russian River from February 3 through March 1, 1998,
- Twenty-seven days of coliform violations,
- Two days of chlorine residual violations,
- Thirteen days of total suspended solids violations,

- One 30-day percent removal total suspended solids violation,
- One 30-day percent removal biochemical oxygen demand violation,
- Twenty seven days of settleable matter sampling violations, and
- Three days of turbidity sampling violations.

The discharge volume is estimated to be 29.64 million gallons. No cleanup of the discharge was made. Therefore, there were 29.639 million gallons discharged to the Russian River that were not cleaned up in excess of 1,000 gallons.

15. In determining the amount of civil liability, the Regional Water Board took into account the nature, circumstances, extent, and gravity of the violation; whether the discharger has the ability to pay; whether the discharger has any prior history of violations; the degree of culpability; whether there were any economic savings as a result of the violation; and such other matters as justice may require, as follows:

Nature, Circumstances, Extent and Gravity

Excessive I&I is a problem for the RRCSD during flood events.

Bypasses to storage followed by discharges to the Russian River have occurred four times in the last four years. The emergency storage pond does not have the capacity to deal with recent flood events.

Approximately 30 million gallons of partially disinfected wastewater was discharged to the Russian River from February 3 through March 1, 1998. Discharge sampling results indicate 44 violations of Order No. 92-51. Over half of these were total coliform violations. In addition there were 27 days of bypass violations from February 2 through February 28, 1998.

The RRCSD did not perform sampling of the Russian River to determine if the discharge adversely impacted the Russian River. The SCWA routinely conducts total and fecal coliform sampling of the Russian River at the SCWA's river diversion structure near Wholer Bridge several miles upstream of the RRWTF. River sampling results are enclosed as Attachment 2. The upstream river and discharge sampling results indicate that the partially treated wastewater had higher total coliform counts than the Russian River on eight of the eighteen days that samples from each coincide.

Ability to Pay

Staff has limited information regarding the RRCSD's or the SCWA's ability to pay. A representative of the RRCSD and the SCWA should be prepared to address their ability to pay the maximum civil liability or any lesser amount. The RRCSD has approximately 2350 ratepayers, and the adopted 1997/98 budget for the RRCSD was approximately \$3,424,000. The

SCWA's adopted 1997/98 budget, for all operations, was approximately \$101,590,000. This difference in ability to pay is the primary reason for a larger portion of the ACL being issued to the SCWA.

Prior History of Violations

The RRCSD and the SCWA discharged 201,000 gallons of treated effluent while irrigating during a rain event in May 1996. The runoff occurred after the May 15 deadline for discharges to the Russian River. Cease and Desist Order No. 97-76 (Order No. 97-76) was adopted in response to this incident. The runoff incident was due, in part, to a lack of adequate storage capacity. Order No. 97-76 established a time schedule for the development of short term and long term solutions to cease discharging waste contrary to Order No. 92-51. The SCWA is currently working on a draft Environmental Impact Report (EIR) to address storage capacity and other issues.

One flood event occurred in 1997 and two flood events occurred in 1995 in the lower Russian River area. Similar events as described above occurred in January 1997, January and March 1995 resulting in discharges of partially disinfected wastewater to the Russian River. Formal enforcement action was not taken.

On June 11, 1985, 3,750 gallons of untreated sewage were discharged to the Russian River from the RRCSD. An Administrative Civil Liability Order was issued to the RRCSD on October 23, 1985, in the amount of \$3,750.

The SCWA is under contract from the RRCSD to operate the RRWTF, and has been operating the RRWTF since January 1995. These are the primary reasons for conditionally suspending

the ACL issued to the SCWA, but not suspending the ACL issued to the RRCSD.

Degree of Culpability

The RRCSD lacks adequate methods to reduce and/or adequately treat high inflow rates. The SCWA is currently working on a draft EIR that should be revised to more directly address this issue.

The RRCSD did not perform sampling of the Russian River to determine if the discharge adversely impacted the Russian River.

Economic Savings

The RRCSD did not treat approximately 30 million gallons of wastewater to AWT standards. It costs \$775 and \$1000 per million gallons, not including capital costs, for the City of Santa Rosa and the Town of Windsor to treat wastewater to AWT standards, respectively. The costs for the smaller Russian River Wastewater Treatment Facility should be higher. Estimating \$1000 per million gallons, the RRCSD had an economic savings of \$29,640, exclusive of capital costs.

Other Matters as Justice May Require

Staff is not aware of any other matters requiring consideration

16. Defenses Raised by the Dischargers: The SCWA and RRCSD have argued that the discharges are subject to the defenses of "bypass" and "upset." The waste discharge requirements contain a prohibition against bypass, but the bypass defense contained in 40 CFR 122.41(m) is not available to the dischargers because it is not incorporated into the waste discharge

requirements. Even if it were incorporated into the permit, it would excuse only the 27 violations of the prohibition against bypass. The upset defense is incorporated in the permit. It provides as follows:

``Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. ... An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations...' (40 CFR 122.41(n))

The discharges do not qualify for the upset defense, however, because they were not the result of an exceptional incident and because the collection system and treatment system are improperly and/or inadequately designed. While February 1998 was a very wet month, there have been four such incidents in a little over three years. Furthermore, historical records indicate there have been 53 flood events above the 32 foot flood elevation in the last 101 years (Attachment 3

indicates 50 flood events above the 32 foot elevation between 1897 and January 1995. There have been three additional flood events-- March 1995, January 1997 and February 1998--since Attachment 3 was produced.) In addition, portions of the collection system become inundated well before the Russian River reaches flood stage. Therefore, the dischargers have not carried their burden of proving that all of the discharges are excused by the upset defense. Even if the defense applied, however, it would excuse violations only of technology based permit effluent limitations. This does not include the coliform limitation, which is derived from receiving water quality considerations, or the sampling violations. Therefore, the number of gallons discharged in violation of the permit would not change. Nonetheless, the issues raised by the dischargers about their lack of control over the high flows in the Russian River was a main factor used in significantly reducing the amount of the ACL from the maximum available.

17. The issuance of this order is an enforcement action to protect the environment, and is therefore exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.) pursuant to Title 14, California Code of Regulations, sections 15308 and 15321(a)(2), and Water Code section 13389.

18. On August 26, 1998, the Regional Water Board held a hearing and received and considered testimony from the dischargers and other interested parties.

THEREFORE, IT IS HEREBY ORDERED that the Russian River County Sanitation District pay an administrative civil liability in the amount of \$25,000 and that the Sonoma County Water Agency pay an administrative civil liability in the amount of \$50,000. \$50,000 of the administrative civil liability for the SCWA shall be suspended conditioned upon the satisfactory completion of Task B outlined in Cease and Desist Order No. 98-57. The \$25,000 administrative civil liability for the RRCSD is due within 30 days of adoption of this Order.

Certification

I, Lee A. Michlin, do hereby
certify that the foregoing is
a full, true, and correct
copy of an Administrative
Civil Liability Order adopted
by the California Regional
Water Quality Control Board,
North Coast Region, on August
26, 1998.

Lee. A Michlin
Executive Officer

(rraclord)